Patent Claims

1. VC-Y-Xc or AU-Y-Xc transport module for SDH or SONET for forming a group of X consecutive, fixedly concatenated, virtual containers, having a PTR for the group, a POH for the group and at least X-1 individual PTR, POH and payload segments for the transparent transmission of tributary bits, wherein X is a natural number greater than 1 and Y is equal to 3 or 4 or a natural number greater than 1.

2. VC-Y-Xc transport module according to Claim 1, the transport module comprising an AU-PTR and a VC-Y-Xc-POH for the group, and also comprises, according to the number of service channels to be transmitted with the group, correspondingly AU-3 or AU-4 PTR, POH and container.

3. VC-Y-Xc transport module according to Claim 1, wherein $Y = 4$ and $X = 4$ and wherein the transport module serves to transmit 3 AU-4s or 9 TU-3s.

4. VC-Y-Xc transport module according to Claim 1, wherein $Y = 4$ and $X = 16$ and wherein the transport module serves to transmit 15 AU-4s or 45 TU-3s.

5. VC-Y-Xc transport module according to Claim 1, wherein $Y = 4$ and $X = 64$ and wherein the transport module serves to transmit 63 AU-4s or 189 TU-3s.

6. VC-Y-Xc transport module according to Claim 1, wherein $Y = 4$ and $X = 256$ and wherein the transport module serves to transmit 255 AU-4s or 765 TU-3s.

7. VC-Y-Xc transport module according to Claim 1, wherein Y = 3 and X = N, where N = 12, 48, 192 or 768, and wherein the transport module serves to transmit N-1 AU-3s.

8. VC-Y-Xc transport module according to Claim 1, wherein Y = 4 and X = N, where N = 16, 64 or 256, and wherein the transport module serves to transmit at least (N/Z)-1 AU-4-Zc's, where Z = 4, 16 or 64.

9. VC-Y-Xc transport module according to Claim 1, wherein Y = 3 and X = N, where N = 48, 192 or 768, and wherein the transport module serves to transmit at least (N/Z)-1 AU-3-Zc's, where Z = 3, 12, 48 or 192.

10. VC-Y-Xc transport module according to Claim 1, wherein the multiplex structure used in the VC-Y-Xc is signalled in the so-called C2 byte of the POH of the group, and wherein this signals a pure AU-4 or AU-3 or mixed AU-4 and AU-3 payload.

11. Device for bundling transmission channels in SDH or SONET that is suitable for generating a transport module according to Claim 1.

12. Device for de-bundling transmission channels in SDH or SONET that is suitable for breaking up a transport module according to Claim 1.

13. Switch router for SDH or SONET, comprising a first matrix for VC-Y-Xc and a second matrix for VC-4 or VC-3, an adaptation module that is connected between the first and the second matrix and a router or an IP, ATM or frame switch that is connected to the first and second matrix, wherein the adaptation module is suitable for breaking up a transport module according to Claim 1 and/or for generating one.

14. Network element of an SDH or SONET network, comprising a first matrix for VC-Y-Xc, a second matrix for VC-4 or VC-3 and an adaptation module that is connected between the first and the second matrix and that is suitable for breaking up a transport module according to Claim 1 and for generating one.

15. Network element according to Claim 10, comprising an add-drop multiplexer function or a cross-connect function.

16. Method of transmitting virtual containers of SDH or SONET signals in which a group of AU-3s or AU-4s is transmitted in a transport module according to Claim 1 with an AU-PTR and an AU-POH for the group.

17. VC-Y-Xc transport module according to Claim 1, the payload segments being comprised in the bundle comprising service channels to be transparently transmitted comprise a mixture of AU-4s and AU-3s.

18. VC-Y-Xc transport module according to Claim 1, the payload segments in the bundle comprising service channels to be transparently transmitted that have different target addresses and/or different source addresses, and the pointers of the virtual service channels being therefore transmitted concomitantly to compensate for frequency deviations.

19. VC-Y-Xc transport module according to Claim 1, the payload segments in the bundle comprising service channels to be transparently transmitted that all have the same target addresses and source addresses, wherein the TU-3s or TU-2s or TU-12s or TU-11s to be transmitted are mapped directly into the VC-Y-Xc without intermediate circuit levels VC-4 and AU-4.

20. VC-Y-Xc transport module according to Claim 1, the payload segments in the bundle comprising service channels to be transparently transmitted that all have the same target addresses and source addresses, wherein the TU-2s or TU-12s or TU-11s to be transmitted are mapped directly into the VC-Y-Xc without an intermediate circuit level VC-3 and AU-3.